

REMARKS

Claims 1 and 29 have been amended by deleting the phrase “C₁-C₂ alkyl celluloses and their derivatives” from these claims. Claims 8 and 28 have been amended in a non-limiting manner in an attempt to better set forth the subject matter being claimed.

Claim 12 has been canceled.

New claims 34-42 have been added. Claim 34 limits the ethylene oxide containing water-soluble nonionic polymer to homopolymers of ethylene oxide, while claim 35 does not include ethylene oxide containing compounds as nonionic polymers. Both claims 34 and 35 do not include C₁-C₂ alkyl celluloses or their derivatives as nonionic polymers.

Claims 36-39 require the presence of a nanoemulsion thickening effective amount of the nonionic polymer. Support for these claims exists, *inter alia*, at page 5, line 25 et seq. and original claim 32.

Claims 40-42 require the nanoemulsions to have specific turbidity properties. Support for these claims exists, *inter alia*, at page 6, lines 11-17.

Applicants note that it is their intention that the phrase “ranging from” found in several pending claims be interpreted to include at least both endpoints of the recited ranges.

Claims 1-11 and 13-42 are currently pending. The Office Action repeated the Restriction Requirement in this case in which it asserted that claims 1-28 (compositions) and claims 29-33 (methods) are directed to different inventions. In response to this Restriction Requirement, Applicants affirm their election of the composition claims (Group I – claims 1-28) for prosecution on the merits. However, Applicants make this election with traverse. For example, Applicants note that claim 33 is a composition claim, not a method claim. Thus, claim 33 should be included in Group I. Applicants intend to seek rejoinder of claims 29-33 as appropriate upon indication of allowable subject matter.

The Office Action rejected claims 1-12 and 14-28 under 35 U.S.C. §102 as anticipated by U.S. patent 5,591,449 (“Bollens”), French patent 2,787,027 (“FR 027”), U.S. patent 6,464,90 (“US 990”), U.S. patent 6,274,150 (“US 150”) and U.S. patent 6,375,960 (“US 960”). The Office Action also rejected claims 1-28 under 35 U.S.C. §103 as obvious over Bollens, FR 027, US 990, US 150, US 960, U.S. patent 6,432,439 (“Suzuki”) and EP 728460 (“EP 460”), alone, in combination and/or in further combination with, U.S. patent 6,004,566; (“Friedman”), U.S. patent 6,287,377 (“Binns”) and/or U.S. patent 6,569,414 (“Bernecker”). In view of the following comments, Applicants respectfully request reconsideration and withdrawal of these rejections.

The pending claims relate to nanoemulsions comprising an oily phase dispersed in an aqueous phase where the oily phase comprises oil globules having a number average size of less than 100 nm, at least one nonionic or anionic amphiphilic lipid, and at least one water-soluble nonionic polymer, wherein the oily phase to amphiphilic weight ratio is 1.2-10. The claimed water-soluble nonionic polymer does not include C₁-C₂ alkyl celluloses and their derivatives.

Regarding the §102 rejections, Applicants respectfully submit that none of the cited references teaches each and every element of the claimed invention. For example,

1) Bollens relates to liposomes, not nanoemulsions. For this reason alone Bollens does not anticipate the claimed invention. The Office Action cites col. 7, lines 43-45 as disclosing that vesicles (oil globules) are 20-500 nm in size, thereby implying that this text satisfies the requirement that the claimed oil globules have a number average size of less than 100 nm. However, the cited text refers to Bollens's liposomes, not to oil globules of an oily phase of a nanoemulsion.

2) FR 027 does not teach the claimed water-soluble nonionic polymers. Accordingly, FR 027 cannot anticipate the claimed invention;

3) US 150 and US 960 do not teach the claimed water-soluble nonionic polymers.

Accordingly, these references cannot anticipate the claimed invention; and

4) US 990 does not teach the claimed oily phase to amphiphilic lipid ratio. Moreover, with respect to claims 34 and 35, US 990 does not teach the claimed water-soluble nonionic polymers. Accordingly, US 990 cannot anticipate the claimed invention.

In view of the above, Applicants respectfully submit that the rejections under 35 U.S.C. §102 are improper and should be withdrawn.

Regarding the § 103 rejections, FR 027, US 150, US 960, Suzuki and EP 460 merely generally suggest the possibility that cellulose derivatives could be used as thickening agents. None of these references teaches or suggests the claimed nonionic polymers. Similarly, US 990 neither teaches nor suggests the nonionic polymers of claims 34 and 35. These primary references neither teach, suggest nor recognize any benefits associated with adding the claimed water-soluble nonionic polymers to nanoemulsions.

Moreover, neither Bollens nor Suzuki relates to nanoemulsions. Bollens relates to liposomes; Suzuki relates to emulsions. Thus, neither of these references teaches or suggests anything about nanoemulsions, let alone adding the claimed water-soluble nonionic polymers to nanoemulsions or any benefits associated from such addition.

Finally, nothing in US 990 would motivate one skilled in the art to modify the compositions disclosed therein to obtain the claimed oily phase to amphiphilic lipid ratio. US 990 does not identify this ratio as being critical, nor does it identify any benefits associated with the claimed ratio.

None of the secondary references cited by the Examiner compensate for these critical deficiencies. Friedman, Binns, and Bernecker do not relate to nanoemulsions. Thus, these secondary references would not motivate one skilled in the art to modify nanoemulsions in any way, let alone by adding the claimed nonionic polymers to nanoemulsions with the

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expectation that useful and acceptable nanoemulsions would result, particularly transparent, thickened nanoemulsions such as those having the characteristics set forth in claims 36-42.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103.

Finally, the Office Action rejected claims 1-28 under 35 U.S.C. § 112. Applicants respectfully submit that the amendments to claims 1, 8 and 28 set forth above have rendered this rejection moot. Accordingly, this rejection should be withdrawn.

Applicants believe that the present application is in condition for allowance. Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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